

Commonwealth of Kentucky
Division for Air Quality
REVISED PERMIT STATEMENT OF BASIS

Final
Conditional Major, Operating/Construction
Permit: F-07-042R1
Comair, Inc.
Erlanger, KY 41018
May 15, 2008
Frough Sherwani, Reviewer

SOURCE ID: 21-015-00136
AGENCY INTEREST: 40442
ACTIVITY: APE20080001

Permit: F-07-042R1 (Minor Revision):

On April 30, 2008, the source applied to the Division for a minor revision to their conditional major permit. The source has requested the following changes:

- Addition of six natural gas-fired water heaters. Units EC17 – EC18, natural gas-fired Sterling Model 100 heaters, have a maximum heat input of 100,000 British Thermal Unit per hour (BTU/hr) each and will be used in the GSE maintenance shop. Units EC19 – EC20, natural gas-fired Sterling Model 100 heaters, have a maximum heat input of 30,000 BTU/hr and will also be used in the GSE maintenance shop. Unit EC21, a natural gas-fired Sterling Model 100 heater, has a maximum heat input of 250,000 BTU/hr and will be used in the GSE maintenance shop. Unit EC23, a natural gas-fired A.O Smith water heater, Model HW-520 100 has a maximum heat input of 520,000 BTU/hr and will be used in the General Offices.
- Addition of two cold cleaners, CC10 and CC11, will be used in the Comair Aircraft Support Facility (CAMSF) and the in the Heavy Check Hanger (HCH), respectively. Comair also requests the addition of five propylene glycol storage tanks (ST20-ST24) to the list of insignificant activities.
- The source would like to make changes to the facility equipment inventory listed in the permit under Section C. These changes include removing equipment that are no longer in use and updating equipment names and sizes.

Unit ID No.	Emission Unit Description
ST04	Comair ST04 Propylene Glycol (Type IV) aboveground Storage Tank 20,000 gallons
ST19	Comair ST19 Terminal Building-Propylene Glycol (Type IV) Above ground Storage Tank 21,000 gallons

- Changes to equipment description are shown in the following table. Propylene glycol storage tanks, ST16 and ST17, are located at the Echo Tank Farm and not the Terminal Building. Additionally, ST17 was erroneously listed as being a 21,000 gallon tank instead of 20,000 gallon. Units CC07 and CC08 cold cleaners are located in CAMSF. Updates are represented in bold font in Table:

Unit ID No.	Emission Unit Description
CC08 EF05	Comair CC08 EF05 CAMSF Battery Room-Battery Electrolyte storage
ST16	Comair ST16 Terminal Building Echo Farm - Propylene Glycol (Type I) Above ground Storage Tank 20,000 gallons
ST17	Comair ST17 Terminal Building Echo Farm -Propylene Glycol (Type IV) Above ground Storage Tank 21,000 20,000 gallons
CC07	Comair CC07– CAMSF Cold Cleaner
CC08	Comair CC08– CAMSF Cold Cleaner

Permit: F-07-042:

SOURCE DESCRIPTION:

On November 08, 2001 the Division received an application from the source for the conditional major permit for the operation of aircraft line maintenance facility 77 Comair Boulevard, Erlanger, Kentucky in Boone County.

The facility operations include aircraft line maintenance, aircraft hangar maintenance, ground support equipment (GSE) maintenance, fuel storage and supply, and emergency backup power supply. The facility currently operates the following air emission sources:

1. Cold solvent cleaning degreasers;
2. External combustion units (boilers, water heaters);
3. Internal combustion units (emergency fire pumps, emergency back up power generators);
4. Storage tanks for fuels (jet fuel and avgas fuel) and deicing fluids;
5. Surface coating (performed inside a booth for GSE coating and outside for architectural coating and maintenance activities);
6. General chemical usage to support aircraft and GSE maintenance activities; and
7. Miscellaneous activities to support maintenance activities, including machining, welding, and abrasive blasting.

The majority of the facility's volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions result from the use of miscellaneous materials (e.g., coatings, solvents, and

adhesives) throughout the facility.

The conditional major draft permit F-02-006 was issued on April 23, 2002. On May 2, 2002, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in Community Press and Recorder, Erlanger, Kentucky. During the final permit determination process, on September 16, 2002 the Division received another application from the source for the addition of a paint booth for Ground Support Equipment.

On July 26, 2004 the Division received an application from the source for the addition of two insignificant activities (one 20,000 gallon type I Ethylene Glycol tank and one 20,000 gallons type IV Ethylene Glycol tank), change in responsible Comair Inc. officer and mailing address. On April 11, 2006 the Division received an application from the source for the following:

1. Accept a facility-wide cap on annual VOC emissions of no more than 45 tons per rolling 12-month period.
2. Accept a facility-wide cap on annual individual HAP emission of no more than 4.0 tons per rolling 12-month period.
3. Accept a facility-wide cap on annual combined HAPS emissions of no more than 11.5 tons per rolling 12-month period.
4. Issue a combined permit for Comair Inc. CVG airport operations and Comair off-airport warehouse and maintenance facility

On November 22, 2006 the Division received an application from the source for the following:

1. Emission Units ST 04 (Propylene Glycol ((Title IV) aboveground Storage Tank) is now considered an insignificant activity unit due to revisions to New Source Performance Standard 40 CFR Part 60 Subpart Kb);
2. Tanks previously used to store Ethylene Glycol (a HAP) now store propylene Glycol (a non HAP);
3. The insignificant activities list has been updated to reflect current operations and include equipment from the CAMSF (Comair Aircraft Maintenance Support Facility).

Since the addition and changes are considered significant per 401 KAR 52:030, Section 16, the Division has decide to re-issue the preliminary determination with a new Permit Number (F-07-042).

COMMENTS:

Type of control and efficiency:

Emission points # 01 (Paint Booth) has fabric filters to control particulate matter. The estimated control efficiency of the filter is 90%. The estimated transfer efficiency of the spray gun is 80%

Emission factors and their source:

AP -42 5th edition, and mass balance are used for the emission factors for PM, VOC and HAPS.

Applicable regulation

401 KAR 52:030, Federally-enforceable permits for nonmajor sources

401 KAR 59:010, New process operations, applies to these emissions points because these are process operations that commenced after July 2, 1975

401 KAR 59:185, New solvent metal cleaning equipment.

EMISSION AND OPERATING CAPS DESCRIPTION:

1. The source has accepted a facility-wide cap on annual VOC emissions including combustion and insignificant activities of no more than 45 tons per rolling 12-month period. The actual VOC emissions shall be calculated based on 12-month rolling total. Compliance with this allowable will be demonstrated by record keeping and emissions estimating methodology specified in the terms and conditions of the permit.
2. The source has accepted a facility-wide cap on annual individual HAP emissions including insignificant activities of no more than 4.0 tons per rolling 12-month period. The actual individual HAP emissions shall be calculated based on 12-month rolling total. Compliance with this allowable will be demonstrated by record keeping and emissions estimating methodology specified in the terms and conditions of the permit.
3. The source has accepted a facility-wide cap on annual combined HAPS emissions including insignificant activities of no more than 11.25 tons per rolling 12-month period. The actual combined HAP emissions shall be calculated based on 12-month rolling total. Compliance with this allowable will be demonstrated by record keeping and emissions estimating methodology specified in the terms and conditions of the permit.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.